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Your Estrogen Can Hurt Your Dog

Topical hormone replacement products for women can cause health problems in dogs.

Many women use topical estrogen creams, lotions, gels, or sprays to help relieve symptoms associated with menopause, such as hot flashes, mood swings, and bone loss. These preparations contain progesterone, estradiol, or similar hormones and are available both over-the-counter and by prescription.



Prevent your dog from licking your skin if you use topical hormone replacement products. Keep hormone “patches” out of reach of your dog, too.

According to the Veterinary Information Network (VIN) News Service, veterinarians have recently become aware that symptoms of hyperestrogenism in dogs can be linked to their owners’ use of topical hormone preparations. These products are often applied to the inner arms, and the hormones are then transferred from the hands or arms when the owner pets or holds the dog. Hormones can also be ingested if the dog licks the ointment from the skin or swallows a transdermal patch.

Signs of hyperestrogenism

Exogenous estrogen can cause swollen vulvas in spayed female dogs or young female puppies, often with even more swelling than if they were in heat. Females may be attractive to males and even allow mating.

Affected male dogs can develop enlarged mammary glands, and male pups may have an underdeveloped penis and testes. Prostate infection, particularly in young dogs, may also be linked to exposure to hormones.

These excess hormones can also cause hair loss in both sexes. Often referred to as endocrine alopecia, Alopecia X, or Adrenal Hyperplasia-Like Syndrome, the hair loss (alopecia) is described as bilaterally symmetric, meaning it affects both sides of the body similarly.

Veterinarians are often at a loss to explain such signs, and may try treatment with antibiotics or corticosteroids such as prednisone. Ovarian remnant syndrome, where part of the ovary is accidentally left behind during a spay, is often suspected, particularly if the dog was spayed during the prior year, and some dogs have been subjected to a second surgery to search for the ovarian tissue thought to be causing the symptoms.

Special endocrinology tests may reveal elevated levels of estradiol, called hyperestrogenism or hyperestrinism, but will not indicate the cause of the excess hormones. Adrenal disorders such as atypical Cushing's disease (Canine Atypical Hyperadrenocorticism, or CAH) may be suspected, with treatments ranging from melatonin and high-lignan flaxseed oil to Lysodren or other drugs used to treat Cushing's disease. None will have any effect on symptoms caused by exogenous hormones. Cats may also be affected, often behaving as though continually in heat.

Treatment and prevention

If you use topical hormone preparations, apply them to areas that are covered by clothing, such as your inner thighs. It's best to use gloves to apply the ointments, or at least wash your hands thoroughly afterwards.

Signs in affected dogs often resolve within a couple of months once exposure ceases, though it may take longer, particularly if exposure has been prolonged. In some cases, it may be necessary for the dog owner to switch to a transdermal patch rather than using topical ointments before signs in the affected dog improve.

Awareness

Veterinarians need to be aware of the possibility of secondary estrogen exposure when

confronted with patients exhibiting signs of hormone imbalance, and should ask their clients whether anyone in the household is using topical hormone preparations. Even young women may be using these products in certain cases, such as following a hysterectomy.

Comparable problems have also been seen in children exposed to hormones in a similar way. The FDA issued a warning in 2009 regarding the adverse effects that testosterone gel, used by both men and women, can have on young children who are inadvertently exposed through secondary contact.

According to VIN, the FDA said it “has received reports of inadvertent exposure to topical estrogen products in children and pets through contact with another person being treated with the products (secondary exposure). The Center for Drug Evaluation and Research and the Center for Veterinary Medicine are evaluating these reports.”

While problems relating to topical estrogen preparations appear to be on the rise, particularly as baby boomers reach the age of menopause, they don't account for all cases of elevated hormones. One internal medicine specialist who is well versed in this issue estimates that ovarian remnant syndrome still outnumbered secondary hormone exposure by a ratio of ten to one.

Reporting

The Veterinary Information Network is considering conducting a survey to determine the prevalence of secondary exposure to pets of topical hormone products. If your dog or cat (or, if you are a veterinarian, your client's pet) has exhibited signs associated with such exposure and you would like to participate in the survey, please send your name and contact information to news@vin.com.

To report a suspected case to the FDA, call (888) FDA-VETS and request form 1932a; fill it out and return. Or go to www.fda.gov/AnimalVeterinary/SafetyHealth and select “Veterinary Adverse Event Voluntary Reporting.” – Mary Straus